## ABSTRACT

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The present invention relates to a CAD/CAM system for design and manufacture of a hearing aid housing comprising a face plate and a shell that is matched to the auditory canal of a user, the system being adapted to receive and process data representing the shape of the auditory canal, forming a three-dimensional model of the shell based on the data, and outputting data representing the model for production of the shell and the face plate based on the model. Manufacture of the face plate includes at least one automatic processing step based on data from a CAD/CAM model of the hearing aid housing. For example, data relating to the circumference of the face plate may be provided to a numerically controlled machine that automatically cuts a separately manufactured face plate along the desired contour that matches the circumference of the corresponding shell. In another embodiment, the hearing aid housing is manufactured with an integrated face plate.